## DESIGN AND IMPLEMENTATION OF DEMONSTRATION PROJECTS IN DEVELOPING COUNTRIES

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## Introduction

The Multilateral Fund of the Montreal Protocol provides opportunities, through demonstration projects, for developing countries to obtain firsthand experience of alternative technologies that may replace the use of ozone-depleting substances, such as methyl bromide. These projects demonstrate new or well-established alternative technologies not used previously in a country, but well proven elsewhere. It would be expected that such technologies could be introduced immediately, or in the near future, as replacements for methyl bromide. Commercial introduction of alternatives may be aided by a follow-up investment project supported by the Multilateral Fund, with the objective of assisting developing countries to reduce use of, and eventually to phase out, methyl bromide. Guidelines on methyl bromide demonstration and investment projects have been drawn up by the Fund Secretariat, with project support only being available to countries that have ratified the Copenhagen Amendment to the Protocol. Agencies responsible for implementing demonstration projects under the Multilateral Fund include the World Bank, UNIDO, and UNDP. This paper will refer more specifically to demonstration projects concerned with post-harvest uses of methyl bromide, but many of the factors discussed are likely to refer also to the pre-harvest sector.

## Project design

From the outset, demonstration projects must be designed with the reasonable expectation that the alternative technologies demonstrated could be introduced without too much difficulty. It is essential, therefore, that in the earliest stages of design the most appropriate personnel in a target country are consulted and account taken of local knowledge and expertise. This may prevent the inclusion of elements in a project that are not appropriate, such as alternative technologies already known and used, or those technically effective but too costly or too difficult to adapt to local conditions. For this reason, during planning visits to developing countries, it is essential to consult as widely as possible all stakeholders having an interest in methyl bromide use. This could include relevant government and non-government agencies, pesticide registration authorities, small farmers and commercial growers, pest control servicing companies, relevant commercial organisations, and importing and exporting agencies. Such consultation should help to avoid including inappropriate alternatives in project proposals and costings, leading to potential problems when a project is implemented. This could occur, for example, in attempting to replace some post-harvest uses of methyl bromide with new and possibly costly technologies which, although technically effective, may not yet have been widely introduced or made fully available commercially. Where international specialists are involved they should, as far as possible, be familiar both with the potential alternative technologies and with the country or region involved, thereby helping to reduce any potential for upsetting local political or cultural sensitivities.

A major factor to be determined at an early stage in project planning is the exact usage of methyl bromide in a country, and the quantities involved. Such data are often lacking or inaccurate, usually because of inadequate consultation, but are essential in deciding the most appropriate alternatives. In post-harvest usage it should be recognised that methyl bromide fumigation is mostly conducted for the immediate control of existing or suspected infestations in commodities, often at ports and other transit situations. Therefore, alternative technologies involving long-term control methods, maybe taking two weeks, are not always appropriate or useful. Similarly, technologies intended to avoid the need for methyl bromide fumigation may not be useful in all situations. Stakeholders in developing countries involved with methyl bromide replacement need to be made aware of the nature and purpose of demonstration projects, and be given all possible assistance in drawing up project proposals. It must be made clear that the Multilateral Fund cannot support basic research into alternatives to methyl bromide. Nor can it support projects that include the re-equipping of laboratories no matter how relevant this may be to evaluating alternatives to methyl bromide.

Methyl bromide is widely used for the quarantine and pre-shipment treatment of commodities moving in international trade and, with few if any alternative treatments available, these uses are not currently controlled under the Montreal Protocol. For this reason the Multilateral Fund does not currently support demonstration projects, or parts of projects, concerned with the replacement of pre-shipment and quarantine uses of methyl bromide. In the past, there has been some uncertainty regarding the exact status of 'pre-shipment fumigations', but it is now agreed that this term should apply only to treatments that are "officially" required, and not to those that are "contractually" required by purchasers. In appropriate projects this difference in usage needs to be taken into consideration at the planning stage, and the extent determined to which pre-shipment treatments are conducted for "official" or for "contractual" purposes. This information will help to clarify the degree to which projects are eligible for support from the Multilateral Fund. To assist in determining the status of pre-shipment fumigations, the Methyl Bromide Technical Options Committee (MBTOC) has developed a logic diagram. A copy of this appears in Annex 1\*.

## **Implementing projects**

The success of a project will be dependent not only upon the design but also on those responsible for its implementation. Local personnel in developing countries will be responsible for much of the technical evaluation of alternative technologies, possibly assisted by international specialists from time to time. It is essential that local staff are properly committed to the project programme and be involved in the planning phase as early as possible. Selection of suitable and experienced local personnel involved is vital, and they must have the support of their managers and to the extent necessary also of the staff of the local office of the implementing agency. Regular reporting will be essential to monitor project progress, this being aided by the visits of international specialists who should also be well placed to advise on any technical problems that arise.

\*MBTOC, 1998. Methyl Bromide Technical Options Committee, 1998 Assessment of Alternatives to Methyl Bromide. United Nations Environment Programme, Ozone Secretariat, PO Box 30552, Nairobi, Kenya. ISBN: 92-807-1730-8

Annex 1. Logic diagram to assist in categorising quarantine and pre-shipment treatments (From MBTOC Report 1998)

